Status: Path 1 of [Dialog Information Services via Mode ### Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog) Trying 31060000009999...Open DIALOG INFORMATION SERVICES PLEASE LOGON: ****** HHHHHHHH SSSSSSSS? ### Status: Signing onto Dialog ***** ENTER PASSWORD: ****** HHHHHHHH SSSSSSS? ****** Welcome to DIALOG ### Status: Connected Dialog level 02.18.00D Last logoff: 15aug03 09:11:46 Logon file001 15aug03 09:20:17 KWIC is set to 50. HILIGHT set on as '*' * * * * See HELP NEWS 225 for information on new search prefixes and display codes *** . *** 1:ERIC 1966-2003/Aug 13 (c) format only 2003 The Dialog Corporation Set Items Description ____ Cost is in DialUnits ?b 155, 5, 73 15aug03 09:20:33 User259876 Session D533.1 \$0.30 0.085 DialUnits File1 \$0.30 Estimated cost File1 \$0.06 TELNET \$0.36 Estimated cost this search \$0.36 Estimated total session cost 0.085 DialUnits SYSTEM: OS - DIALOG OneSearch File 155:MEDLINE(R) 1966-2003/Aug W2 (c) format only 2003 The Dialog Corp. *File 155: Medline has been reloaded and accession numbers have changed. Please see HELP NEWS 155. 5:Biosis Previews(R) 1969-2003/Aug W2 File (c) 2003 BIOSIS File 73:EMBASE 1974-2003/Aug W2 (c) 2003 Elsevier Science B.V. *File 73: Alert feature enhanced for multiple files, duplicates removal, customized scheduling. See HELP ALERT. Set Items Description ____ ?s (hepatoblast) or (hepatic (w) (progenitor or precursor or stem)) 72 HEPATOBLAST 399971 HEPATIC 62627 PROGENITOR 211602 PRECURSOR 315824 STEM HEPATIC(W) ((PROGENITOR OR PRECURSOR) OR STEM) 463 (HEPATOBLAST) OR (HEPATIC (W) (PROGENITOR OR PRECURSOR OR S1 STEM))

```
precursor or stem)
?s (liver (w) (progenitor
>>>Unmatched parentheses
?s (liver (w) (progenitor or precursor or stem))
         1434035 LIVER
           62627 PROGENITOR
          211602 PRECURSOR
          315824 STEM
             640 (LIVER (W) (PROGENITOR OR PRECURSOR OR STEM))
      S2
?s s1 or s2
             523 S1
             640 S2
            1086 S1 OR S2
      S3
?s s3 and (cadaver or autopsy)
            1086 S3
           44289
                 CADAVER
          172593 AUTOPSY
               4 S3 AND (CADAVER OR AUTOPSY)
      S4
?rd
...completed examining records
               3 RD (unique items)
      S5
?t s5/3,k/all
            (Item 1 from file: 5)
 5/3, K/1
DIALOG(R) File 5: Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
          BIOSIS NO.: 200100116746
12909597
Adult *liver* *stem* cells: Bone marrow, blood, or liver derived?
AUTHOR: Crosby H A; Strain A J(a)
AUTHOR ADDRESS: (a) Liver Research Labs, Queen Elizabeth Hospital,
  Edgbaston, Birmingham, B15 2TH: a.j.strain@bham.ac.uk**UK
JOURNAL: Gut 48 (2):p153-154 February, 2001
MEDIUM: print
ISSN: 0017-5749
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
Adult *liver* *stem* cells: Bone marrow, blood, or liver derived?
... ABSTRACT: shown in animal models that hepatocytes and cholangiocytes can
 derive from bone marrow cells. We have investigated whether such a
  process occurs in humans. Archival *autopsy* and biopsy liver specimens
  were obtained from 2 female recipients of therapeutic bone marrow
  transplantations with male donors and from 4 male recipients of
  orthotopic...
DESCRIPTORS:
  ...ORGANISMS: PARTS ETC: *liver* *stem* cells
             (Item 2 from file: 5)
 5/3,K/2
DIALOG(R)File
               5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
         BIOSIS NO.: 199800482307
11700576
Primary liver tumour of intermediate (hepatocyte-bile duct cell) phenotype:
  A progenitor cell tumour?
AUTHOR: Robrechts C; De Vos R; Van Den Heuvel M; Van Cutsem E; Van Damme B;
  Desmet V; Roskams T(a)
AUTHOR ADDRESS: (a) Dep. Pathol., Univ. Leuven, Minderbroedersstraat 12,
  B-3000 Leuven**Belgium
JOURNAL: Liver 18 (4):p288-293 Aug., 1998
ISSN: 0106-9543
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
```

...ABSTRACT: one hand and sile duct cell features on the other hand. Nine days after admission, the patient died due to liver failure and hepatic encephalopathy. *Autopsy* excluded another primary tumour site. Overall, this tumour was a primary liver tumour with an intermediate phenotype and with a very rapid clinical course. The...
DESCRIPTORS:

...ORGANISMS: PARTS ETC: *liver* *progenitor* cell

```
5/3,K/3 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2003 Elsevier Science B.V. All rts. reserv.
```

10543135 EMBASE No: 2000008374

Intrauterine transplantation of fetal *liver* *stem* cells for the treatment of beta-thalassemia and immunodeficiency diseases

Touraine J.-L.

J.-L. Touraine, Dept. of Transplant./Clin. Immunol., Claude Bernard University, Lyon France

Reviews in Clinical and Experimental Hematology (REV. CLIN. EXP.

HEMATOL.) (United Kingdom) 1999, 8/1-4 (33-48)

CODEN: RCEHF ISSN: 1365-151X DOCUMENT TYPE: Journal; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 52

Intrauterine transplantation of fetal *liver* *stem* cells for the treatment of beta-thalassemia and immunodeficiency diseases

...the prenatal, in utero application of stem cell transplants to treat severe genetic disorders of the human fetus. Six patients have been transplanted with fetal *liver* *stem* cells. Recipient ages ranged from 12 to 28 weeks postfertilization, donor ages from 7 to 14 weeks postfertilization. The first patient had bare lymphocyte syndrome... ...this treatment and was cured from severe combined immunodeficiency in 1989. She had 80% donor-derived lymphocytes, but unfortunately died one month ago following a *cadaver* liver transplant which was done to treat a sclerosing cholangitis. A third patient, without immunodeficiency, received the transplant at 12 weeks postfertilization, to treat beta0...?ds

```
Set
        Items
                Description
S1
          523
                (HEPATOBLAST) OR (HEPATIC (W) (PROGENITOR OR PRECURSOR OR -
S2
          640
                (LIVER (W) (PROGENITOR OR PRECURSOR OR STEM))
S3
         1086
                S1 OR S2
S4
                S3 AND (CADAVER OR AUTOPSY)
            4
S5
            3
               RD (unique items)
?s s2 and (adult)
             640 S2
         4603629 ADULT
      S6
             178 S2 AND (ADULT)
?s s6 and (heart (w) beating)
             178 S6
         1681150 HEART
           17413 BEATING
            1909 HEART (W) BEATING
      S7
               O S6 AND (HEART (W) BEATING)
?s s6 and (isolation or purification or processing or harvesting)
             178 S6
          884520 ISOLATION
          727904 PURIFICATION
          441169
                 PROCESSING
           31467 HARVESTING
                  S6 AND (ISOLATION OR PURIFICATION OR PROCESSING OR
      58
                  HARVESTING)
```

...completed examining records

S9 8 RD (unique items)

?t s9/3,k/all

9/3,K/1 (Item 1 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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14360669 22387521 PMID: 12500199

Characterization of cell types during rat liver development.

Fiegel Henning C; Park Jonas J h; Lioznov Michael V; Martin Andreas; Jaeschke-Melli Stefan; Kaufmann Peter M; Fehse Boris; Zander Axel R; Kluth Dietrich; et al

Department of Pediatric Surgery, University Hospital Eppendorf, Hamburg, Germany. fiegel@uke.uni-hamburg.de

Hepatology (Baltimore, Md.) (United States) Jan 2003, 37 (1) p148-54 ISSN 0270-9139 Journal Code: 8302946

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed

Hepatic stem cells have been identified in *adult* liver. Recently, the origin of hepatic progenitors and hepatocytes from bone marrow was demonstrated. Hematopoietic and hepatic stem cells share the markers CD 34, c-kit, and Thyl. Little is known about *liver* *stem* cells during liver development. In this study, we investigated the potential stem cell marker Thyl and hepatocytic marker CK-18 during liver development to identify putative fetal *liver* *stem* cell candidates. Livers were harvested from embryonic and fetal day (ED) 16, ED 18, ED 20, and neonatal ED 22 stage rat fetuses from Sprague...

... cells (CK-18 positive) in fetal rat liver express Thyl. Other progenitors express only CK-18. This indicates the coexistence of different hepatic cell compartments. *Isolation* and further characterization of such cells is needed to demonstrate their biologic properties.

9/3, K/2 (Item 2 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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09600382 21384684 PMID: 11493271

Liver *stem* cells: a potential source of hepatocytes for the treatment of human liver disease.

Faris R A; Konkin T; Halpert G

Department of Pediatric Oncology Research, Rhode Island Hospital, 593 Eddy Street, Providence, RI 02903, U.S.A. Ronald Faris@brown.edu

Artificial organs (United States) Jul 2001, 25 (7) p513-21, ISSN 0160-564X Journal Code: 7802778

Contract/Grant No.: RO1 CA60005; CA; NCI

Comment in Artif Organs. 2001 Jul;25(7) 509-12; Comment in PMID 11493270

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed

Liver *stem* cells: a potential source of hepatocytes for the treatment of human liver disease.

... differentiate along hepatocytic and biliary lineages. Because oval cells proliferate only when hepatocyte replication is impaired, they are considered to be the progeny of facultative *liver* *stem* cells (FLSCs). Identification and *isolation* of FLSCs has been hampered by the lack of markers that delineate these bipotential progenitors. We hypothesized that transition ductal cells are FLSCs because they...

... differentiate along me hepatic lineage following compization of the liver. The intent of this review is to provide insight into the nature and origin of *liver* *stem* cells and to explore the possibility that stem cell technology may lead to the development of clinical modalities for the treatment of human liver disease.

; *Adult*; Cell Division--physiology--PH; Cell Transplantation--methods --MT; Graft Rejection; Graft Survival; Hepatocytes--transplantation--TR; Rats; Sensitivity and Specificity; Stem Cells--physiology--PH

9/3,K/3 (Item 3 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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08233687 94299642 PMID: 8027180

Expression of hepatic transcription factors during liver development and oval cell differentiation.

Nagy P; Bisgaard H C; Thorgeirsson S S

Laboratory of Experimental Carcinogenesis, National Cancer Institute, Bethesda, Maryland 20892-0037.

Journal of cell biology (UNITED STATES) Jul 1994, 126 (1) p223-33,

ISSN 0021-9525 Journal Code: 0375356

Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

The oval cells are thought to be the progeny of a *liver* *stem* cell compartment and strong evidence now exists indicating that these cells can participate in liver regeneration by differentiating into different hepatic lineages. To better understand...

... transcriptional factors gradually decrease during the late period of embryonic liver development while three factors (HNF1 beta, HNF3 beta, and DBP) increase. In the normal *adult* rat liver the expression of all the transcription factors are restricted to the hepatocytes. However, during early stages of oval cell proliferation both small and...

; Blotting, Northern; CCAAT-Enhancer-Binding Proteins; Cell Differentiation; Cell Division; DNA-Binding Proteins--genetics--GE; DNA-Binding Proteins--*isolation* and *purification*--IP; In Situ Hybridization; Liver--anatomy and histology--AH; Liver--embryology--EM; Liver Regeneration; Nuclear Proteins--genetics--GE; Nuclear Proteins--*isolation* and *purification*--IP; Rats; Stem Cells--cytology--CY; Transcription Factors--genetics--GE; Transcription Factors--*isolation* and *purification*--IP; Up-Regulation

9/3,K/4 (Item 4 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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04439536 84081891 PMID: 6690044

Isozyme profiles of oval cells, parenchymal cells, and biliary cells isolated by centrifugal elutriation from normal and preneoplastic livers.

Hayner N T; Braun L; Yaswen P; Brooks M; Fausto N

Cancer research (UNITED STATES) Jan 1984, 44 (1) p332-8, ISSN 0008-5472 Journal Code: 2984705R

Contract/Grant No.: CA 23226; CA; NCI; GM 07601; GM; NIGMS

Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

The fetal liver isozymes aldolase A and pyruvate kinase K increase in livers of *adult* rats fed a choline deficient-diet containing 0.1% ethionine. Oval cells isolated by centrifugal elutriation from preneoplastic livers of animals receiving the carcinogenic diet contained

these fetal forms as values as fetal-*adult* isozyme hybros. In contrast, parenchymal cells isolated from the livers of these animals had only aldolase B and pyruvate kinase L, the same isozymes present in parenchymal cells of normal *adult* rats. Liver homogenates from rats receiving the carcinogenic diet contain lactate dehydrogenase (LDH) 1, LDH 2, and LDH 3 in addition to LDH 4 and...

... isolated from normal and preneoplastic livers. Cells of biliary epithelium from normal livers also contain aldolase A and pyruvate kinase K, but not the fetal-*adult* isozymes present in oval cell populations. The results indicate that, in animals receiving this carcinogenic diet, isozyme alterations associated with neoplasia result from the proliferation...

... cell population which contains these enzymes and not from "dedifferentiation" of mature hepatocytes. Furthermore, the data suggest that this new cell population may include a *liver* *stem* cell compartment containing cells in transitional states of differentiation.

; Choline Deficiency--enzymology--EN; Fructose-Bisphosphate Aldolase--*isolation* and *purification*--IP; Isoenzymes--*isolation* and *purification*--IP; Lactate Dehydrogenase--*isolation* and *purification*--IP; Molecular Weight; Pyruvate Kinase--*isolation* and *purification*--IP; Rats; Rats, Inbred Strains

9/3,K/5 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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13974699 BIOSIS NO.: 200200603520

Isolation of hematopoietic and *liver* *stem* cells using FACS.

AUTHOR: Nakauchi Hiromitsu

JOURNAL: Cytometry Supplement (11):p38 2002

MEDIUM: print

CONFERENCE/MEETING: XXI Congress of the International Society for

Analytical Cytology San Diego, CA, USA May 04-09, 2002 SPONSOR: International Society for Analytical Cytology

ISSN: 1046-7386 RECORD TYPE: Citation LANGUAGE: English

Isolation of hematopoietic and *liver* *stem* cells using FACS. DESCRIPTORS:

...ORGANISMS: *adult*

...ORGANISMS: PARTS ETC: blood and lymphatics, *isolation*; ...

...*liver* *stem* cells...

...digestive system, *isolation*

9/3,K/6 (Item 1 from file: 73)

DIALOG(R) File 73: EMBASE

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11543766 EMBASE No: 2002116685

Generation and characterization of p53 null transformed hepatic progenitor cells: Oval cells give rise to hepatocellular carcinoma

Dumble M.L.; Croager E.J.; Yeoh G.C.T.; Quail E.A.

E.A. Quail, Department of Biochemistry, The University of Western

Australia, Crawley, WA 6009 Australia AUTHOR EMAIL: equail@cyllene.uwa.edu.au

Carcinogenesis (CARCINOGENESIS) (United Kingdom) 2002, 23/3 (435-445)

CODEN: CRNGD ISSN: 0143-3334 DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 60

Oval cells are bipotent of *liver* *stem* cells able to fferentiate into hepatocytes and bile out epithelia. In normal *adult liver oval cells are quiescent, existing in low numbers around the periportal region, and proliferate following severe, prolonged liver trauma. There is evidence implicating oval ...

MEDICAL DESCRIPTORS:

...bile duct; epithelium cell; cell count; disease severity; liver injury; cell immortalization; cell lineage; liver carcinogenesis; knockout mouse; cell cycle; diet supplementation; wild type; cell *isolation*; centrifugation; cell culture; phenotype; cell growth; carcinogenicity; gene expression; Northern blotting; immunocytochemistry; gene deletion; nonhuman : male; female; mouse; controlled study; animal cell; article; priority journal

(Item 2 from file: 73) 9/3,K/7

DIALOG(R) File 73: EMBASE

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EMBASE No: 2002045548 11474016

Derivation, characterization, and phenotypic variation of hepatic progenitor cell lines isolated from *adult* rats

Yin L.; Sun M.; Ilic Z.; Leffert H.L.; Sell S.

Dr. S. Sell, Department of Patholology, Laboratory of Medicine, Albany Médical College, 47 New Scotland Ave., Albany, NY 12208 United States AUTHOR EMAIL: sells@mail.amc.edu

Hepatology (HEPATOLOGY) (United States) 2002, 35/2 (315-324)

ISSN: 0270-9139 CODEN: HPTLD DOCUMENT TYPE: Journal ; Article

SUMMARY LANGUAGE: ENGLISH LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 50

Derivation, characterization, and phenotypic variation of hepatic progenitor cell lines isolated from *adult* rats

Liver *progenitor* cells (LPCs) cloned from *adult* rat livers following allyl alcohol injury express hematopoietic stem cell and early hepatic lineage markers when cultured on feeder layers; under these conditions, neither mature...

MEDICAL DESCRIPTORS:

*phenotype; *precursor cell; *cell *isolation*; *liver cell; *liver injury --etiology--et

(Item 3 from file: 73) 9/3, K/8

DIALOG(R)File 73:EMBASE

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EMBASE No: 1996332667 06667786

Growth and differentiation in culture of clonogenic hepatocytes that express both phenotypes-of hepatocytes and biliary epithelial cells

Tateno C.; Yoshizato K.

Yoshizato MorphoMatrix Project, ERATO, Research Development Corp. of Japan, 3-13-26, Kagamiyama, Hiqashihiroshima, Hiroshima 739 Japan American Journal of Pathology (AM. J. PATHOL.) (United States) 149/5 (1593-1605)

CODEN: AJPAA I-SSN: 0002-9440 DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

A cell fraction containing small hepatocytes and nonparenchymal cells was isolated from the *adult* rat liver and was cultured in the presence of vitamin C, epidermal growth factor, nicotinamide, and dimethylsulfoxide. All of the small hepatocytes that had attached...

...addition, cells were identified that ceased to express albumin and in turn were positive for CK19 or CK7. Therefore, the colony was considered to

```
contain *liver* *progenit *-like cells that can different te during culture into cells expressing phenotypes of mature hepatockes or biliary
epithelial cells.
MEDICAL DESCRIPTORS:
animal cell; article; cell *isolation*; cell proliferation; colony
formation; culture medium; immunocytochemistry; labeling index; liver
parenchyma; liver regeneration; nonhuman; phenotype; precursor cell;
priority journal; rat; stellate cell
?ds
Set
        Items
                 Description
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S1
          523
                 (LIVER (W) (PROGENITOR OR PRECURSOR OR STEM))
          640
S2
         1086
                 S1 OR S2
S3
                 S3 AND (CADAVER OR AUTOPSY)
S4
             4
                 RD (unique items)
S5
             3
                 S2 AND (ADULT)
S6
          178
                 S6 AND (HEART (W) BEATING)
S7
                 S6 AND (ISOLATION OR PURIFICATION OR PROCESSING OR HARVEST-
S8
             ING)
                RD (unique items)
S9
?logoff
       15aug03 09:29:08 User259876 Session D533.2
             $2.35 0.734 DialUnits File155
                $0.84 4 Type(s) in Format 3
             $0.84 4 Types
            Estimated cost File155
                    0.552 DialUnits File5
                $5.25 3 Type(s) in Format 3
             $5.25 3 Types
     $8.34 Estimated cost File5
             $5.01 0.542 DialUnits File73
               $10.20 4 Type(s) in Format 3
            $10.20 4 Types
    $15.21 Estimated cost File73
             OneSearch, 3 files, 1.828 DialUnits FileOS
     $2.10 TELNET
    $28.84 Estimated cost this search
$29.20 Estimated total session cost
                                              1.914 DialUnits
```

Status: Signed Off. (9 minutes)